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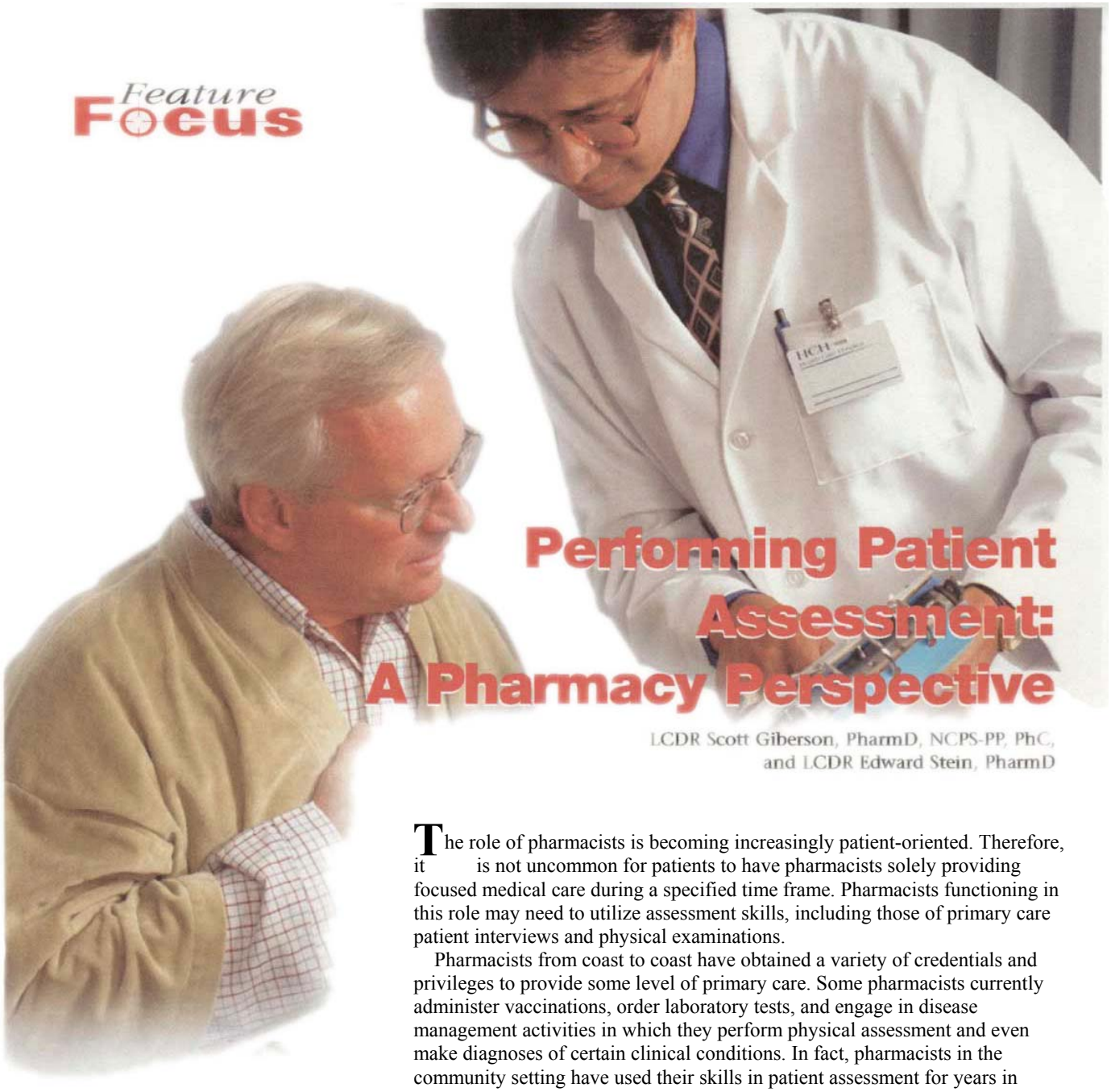

Performing Patient Assessment: A Pharmacy Perspective

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The role of pharmacists is becoming increasingly patient-oriented. Therefore, it is not uncommon for patients to have pharmacists solely providing focused medical care during a specified time frame. Pharmacists functioning in this role may need to utilize assessment skills, including those of primary care patient interviews and physical examinations.

Pharmacists from coast to coast have obtained a variety of credentials and privileges to provide some level of primary care. Some pharmacists currently administer vaccinations, order laboratory tests, and engage in disease management activities in which they perform physical assessment and even make diagnoses of certain clinical conditions. In fact, pharmacists in the community setting have used their skills in patient assessment for years in dispensing OTC products.

Thus, today's pharmacist may find it advantageous to become more familiar with techniques of patient assessment. This article will describe approaches to patient assessment in the pharmacy. It also will discuss how pharmacists can use the patient interview and the physical examination to improve patient care.

Patient Assessment

Assessment is defined as the collection of data about an individual's health state, the purpose of which is to make a judgment or diagnosis.' The patient interview contains the subjective data, whereas the physical examination is geared toward supplementing this information with objective findings. The findings of clinical signs and symptoms will then aid in the overall patient assessment and outcome.

Table 1

"Basic Seven" Line of Questioning

Location	Where is the symptom?
Quality	What is it like?
Quantity	How severe is it? How does it interfere with the patent's life?
Timing	How long has it been present? When did it start? How often does it occur?
Setting	How did this happen? What was the patient doing?
Modifying factors	What makes it better? What makes it worse?
Associated symptoms	What other occurrences have taken place?

Because a physician's assessment is used to evaluate the cause of disease, how might a pharmacist's assessment be used? The pharmacy profession provides many levels of medical care. The challenge for the profession is to advance the patient assessment skills of pharmacists and to show their worth through improved patient outcomes. There are many ways a patient interview and physical examination can be utilized from a pharmacy perspective to improve patient outcome.

It is not always necessary to associate the elements of a patient assessment, especially a physical examination, with the notion of diagnosis. Pharmacists can use assessment skills to gather important clinical data that may aid in referral, treatment, or other primary care pathways. When a patient presents to the pharmacist with sudden symptoms of hypoglycernia, for example, patient interview skills, a general survey, and a limited physical examination may be used to obtain a clinical picture of the illness. In turn, the pharmacist may make an initial judgment on the patient's condition that may require immediate referral and/or treatment.

A pharmacist properly trained in assessing extraocular muscle function, for instance, may be able to detect phenytoin toxicity by observing excessive nystagmus during the examination. No diagnosis is necessary, but a decision regarding a proper referral or a serum drug level measurement may be appropriate.

Another example would be that of a patient with diabetes who has not been seen by his or her primary care provider for 2 years but continues to get medications refilled. This scenario increases the value of the pharmacist's physical examination skills. If the appropriate environment is attainable (an examination room), the pharmacist may ask to do a foot assessment. If trained well in examination techniques, the pharmacist may be able to detect early signs of ulceration, callus, deformity, or peripheral neuropathy.

These examples illustrate how a pharmacist in a community pharmacy or in an ambulatory clinic setting can apply assessment skills. If the profession can demonstrate the value of these skills, pharmacists will have more opportunity to function in expanded scopes. Programs such as the Indian Health Service' and the Department of Veterans Affairs have long been known for successes with pharmacists functioning in these roles.

Patient Interview

When a patient presents to the pharmacist with an ailment or complaint, the pharmacist usually goes through a series of questions to identify and elaborate on the problem. Similar to the 3 prime questions in a medication consultation session, this set of assessment questions is equally important to learn for an initial patient interview. Successful and experienced pharmacists have found that beginning a patient interaction with even a simple open ended question such as "What can I help you with today?" establishes good pharmacist-patient rapport. After receiving the patient's answer, the follow-up statement can be "Tell me more about it."

Following these questions, the pharmacist should do a partial summary for the patient. The partial summary will check the pharmacist's accuracy and understanding of the chief complaint and will display empathy for the patient's condition. The pharmacist can then go into what can be called the "Basic Seven," an open ended line of questioning to elicit a more detailed explanation (Table 1).

Following the "Basic Seven" line of questioning, it is appropriate to summarize what the patient has reported to verify this subjective information with the patient. At this point, the pharmacist may choose to make an assessment or proceed with more steps, such as a history, a review of systems, a general survey, and a physical examination.

Approach to the Physical Examination

Pharmacists have garnered much recognition as among America's most trusted professionals,' but physical examination skills have not traditionally been a part of pharmacy practice. Therefore, it is a good idea to acquire additional training in this area. When preparing for a physical examination, pharmacists should make sure that introductions take place and that the patient is aware of the procedures. Pharmacists are usually viewed by patients as health care professionals who do not perform physical examinations. A high level of trust and professionalism are needed during a physical examination. The patient is

Table 2

Questions for the Pharmacist to Ask Himself or Herself During a Physical Examination
What am I examining?
How do I examine it?
What am I looking for?
What do I do about it?

often anxious - a feeling that is augmented with a stranger performing a physical examination. A clinician who is knowledgeable, professional, experienced, and quietly confident usually puts the patient at ease.

Although the patient interview elicits the symptoms, or the subjective findings, it can be influenced by the patient's emotional reactions, anxiety intelligence, education, and environment. Patients may actually hide or minimize symptoms from their clinician. The physical examination, however, provides objective findings, which the patient may not influence.

When initiating a physical examination, it may be useful for the pharmacist to silently ask 4 simple open ended questions that will help organize one's thoughts for the physical examination (Table 2). Since the nature of each question is open ended, it forces the practitioner to answer the question. The first question addresses 2 items. First, it assembles data from the patient interview into the initial assessment possibilities. It identifies the area(s) of the body on which the pharmacist may want to follow up with a physical examination. Second, it suggests an anatomical perspective and forces the pharmacist to focus on just that anatomy. Commanding a specific knowledge of anatomy will augment the pharmacist's ability to recognize the signs and document the findings. It is more descriptive to assess an "injected conjunctiva with no sclera or corneal trauma" than it does a "bloodshot eye." In order to make this assessment, the first element that should be mastered is anatomy.

The question "How do I examine it?" brings into consideration the various techniques, tests, and more focused parts of the general physical examination. They include the basic techniques of inspection, percussion, palpation, and auscultation, but they also involve special techniques for individual anatomical areas. Examples of such techniques may include otoscopic or fundoscopic examinations and tests such as the straight leg raise, Phalen's maneuver, or the obturator test. Pharmacists should have knowledge of all the basic assessment techniques for each area and how to properly perform them. Acquiring these skills through practice will aid in making a more accurate assessment or referral.

The third question, "What am I looking for?" is yet another open ended question that will focus the pharmacist's thought process. What are the possible causes of this condition? What are the signs associated with them? The pharmacist must have a working knowledge of disease states, differential diagnosis, and common complaints. Most likely this will not involve a diagnosis. When a patient presents with complaints of "strep throat," the pharmacist has a basic idea of the symptoms and/or signs to assess. This will not only help guide the interview, but also guide the physical examination. During this examination, the findings may suggest a more serious problem, such as pneumonia. Thus, answering "What am I looking for?" may assist with an important decision on treatment.

In answering the fourth and final question, many factors are taken into consideration, including scope of practice, urgency of condition, and provider consultation. The answer to the question requires assimilation of the findings (signs and symptoms from the assessment) with the pharmacist's skills and the formulation of a decision.

Physical Examination Techniques

The basic skills required for physical examination are inspection, palpation, percussion, and auscultation (performed in that order). Auscultation usually comes as the last of the 4 techniques. When examining the abdominal area, however, it is best to perform auscultation before percussion or palpation. This will preserve certain auscultatory sounds that should not be elicited or masked by touch. A trained clinician will not only use the basic skills, but also use the senses, including sight, smell, and touch.

Organizing the Examination

In practice, a clinician should be able to mentally organize a complete physical examination prior to carrying out the procedure to help assure completeness and accuracy. The clinician should have already formulated some aspects of differential diagnosis based solely on the history and patient interview. Based on the initial assessment, there may not be a need to do a full examination.

An abbreviated physical examination is outlined in Table 3. A more detailed discussion of physical examination can be found in many reference books, such as the *Bates Guide to Physical Examination and History Taking* or *Jarvis' Physical Examination and Health Assessment*.

"Red Flags"

In the outline in Table 3, there are findings that may warrant an immediate referral or a call to the primary provider. Recognizing these situations that some may refer to as "red flags" is essential when the pharmacist's scope of practice includes physical assessment.

Table 3

Physical Examination Outline

Location	Finding/Technique
Integumentary system	Edema, hydration, erythema, infection, infestation, lesions
Head and face	Size, shape, deformity; facial movements; inflammation
Eyes	Visual acuity, periorbital inflammation, conjunctivitis, pupillary function; funcloscopic examination; cataracts; hemorrhage
Ears	External otitis, perforated tympanic membranes, effusion, otitis media
Nose/Sinus	Deformity, septum, turbinates; discharge, obstruction, sinus tenderness
Oral/pharyngeal	Erythema, exudates, postnasal drip; tracking: gingivitis; floor; tonsillitis
Lymph nodes	Lymphadenopathy, tenderness
Neck	Tumors and inflammation, thyroid gland size, tenderness, neck mobility
Chest	Symmetry, size and shape, clear to auscultation; character of respiration; stridor, wheezing
Cardiovascular	Rate, rhythm, heart sounds (murmurs, arrhythmias)
Abdomen	Organ palpation; masses, tenderness
Extremities	Proportions, deformities, enlargement, edema, musculoskeletal pain
Neurologic	Mental status; cranial nerves, motor and sensory systems, reflexes

Documentation

Documentation has both clinical and medical-legal implications. After documenting the patient interviews and physical assessment, the pharmacist must remember to continue by describing a plan of follow-up care (if needed). It is an essential piece of the puzzle. Any provider should be able to look at the note and know exactly what was accomplished, along with the appropriate follow-up. One should keep in mind, "If it is not documented, it did not happen."

Summary

The profession of pharmacy is expanding to include primary care delivered by pharmacists. In many communities in the United States, the pharmacist may be the only locally available medical professional. Pharmacists are now involved in many facets of the patient-centered health care system and can utilize their unique knowledge base to improve outcomes. By building on this knowledge base, and obtaining expanded training in patient assessment, pharmacists can become more involved in a variety of roles. The most important outcomes of these expanded roles will be the optimization of patient care.

For a list of references, send a stamped, self-addressed envelope to: References Department, Attn. D. Campagnola, Pharmacy Times, 241 Forsgate Drive, Jamesburg, NJ 08831; or send an e-mail request to: dcampagnola@mwc.com.